

Sequence Listing

SEQ ID NO. 1 - The full-length nucleotide sequence of the spike (S) gene of SARS CoV, clone 12 of 2774 strain

RNA linear

ORGANISM: SARS coronavirus 2774 strain

Viruses; ssRNA positive-strand viruses, no DNA stage;  
Nidovirales; Coronaviridae; Coronavirus.

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 cttgctgcaa 3710 3711 gtttgatgag gatgactctg agccagttct caagggtgct aaattacatt  
 acaca 3765

SEQ ID NO. 2 - The full-length amino acid sequence of the spike (S)  
 gene of SARS CoV, clone 12 of 2774 strain  
 Amino acid

1 MFIFLLFLTL TSGSDLRCT TFDDVQAPNY TQHTSSMRGV YYPDEIFRSD TLYLTQDLSL  
 PFYSNVTGFH 70  
 71 TINHTFGNPV IPFKDGIYFA ATEKSNVVRG WVGSTMNK SQSVIIINNS TNVIRACNF  
 ELCDNPFPAV 140  
 141 SKPMGTQHT MIFDNAFNCT FEYISDAFSL DVSEKSGNFK HLREFVFNK DGLYVYKGY  
 QPIDVVRDLP 210  
 211 SGFNTLKPFI KLPLGINITN FRILTAFSP AQDIWGTSA AYFVGDLPKTF MLKYDENG  
 TITDAVDCSQ 280  
 281 NPLAELKCSV KSFEIDKGIY QTSNFRVVPV GDVVRFPNIT NLCPFGEVFN ATKFPSVYAW  
 ERKKISNCVA 350 351 DYSLYNSTV FSTFKCYGVS ATKLNLCFS NVYADSFVVK GDDVRQIAPG  
 QTGVIADYNY KLPDDFMGCV 420 421 LAWNTRNIDA TSTGNVYKY RYLRHGKLRP FERDISNVFP  
 SPDGKPCTPP ALNCYWPLND YGFYTTTGIG 490 491 YQPYRVVLS FELNAPATV CGPKLSTDLI  
 KNQCVNFNEN GLTGTGVLTP SSKRFQPFQ FGRDVSDFTD 560 561 SVRDPKTSEI LDISPCSFGG  
 VSVITPGTNA SSEAVLYQD VNCTDVSTAI HADQLTPAWR IYSTGNVVFQ 630 631 TQAGCLIGAE  
 HVDTSYECDI PIGAGICASY HTVSLLRSTS QKSIVAYTMS LGADSSIAYS NNTIAIPTNF 700 701  
 SISITTEVMP VSMAKTSVDC NMYICGDSTE CANLLLQYGS FCTQLNRALS GIAAEQDRNT REVFAQVKQM  
 770 771 YKTPTLKYFG GFNFSQLLPD PLKPTKRSFI EDLLFNKVTI ADAGFMKQYG ECLGDINARD

LICAQKFNGL 840 841 TVLPPLLTDD MIAAYTAALV SGTATAGWTF GAGAALQIPF AMQMAYRFNG  
 IGVTONVLYE NQKQIANQFN 910 911 KAISQIQESL TTTSTALGKL QDVVNQNAQA LNTLVKQLSS  
 NFGAISSVLN DILSRDLKVE AEVQIDRLIT 980 981 GRLQSLQTYV TQQLIRAAEI RASANLAATK  
 MSECVLGQSK RVDFCGKGYH LMSFPQAAPH GVVFLHVTYA 1050 1051 PSQERNFTTA PAICHEGKAY  
 FPREGVVFVN GTSWFITQRN FFSPQIITTD NTFVSGNCDV VIGIINNTVY 1120  
 1121 DPLQPELDSF KEELDKYFKN HTSPDVDLGD ISGINASVVN IQKEIDRLNE VAKNLNESLI  
 DLQELGKYEQ 1190 1191 YIKWPWYVWL GFIAGLIAIV MVTILLCCMT SCCSCLKGAC SCGSCCKFDE  
 DDSEPVKGV KLHYT 1255

SEQ ID NO. 3 - The nucleotide sequence of SA10 fragment of the spike (S) gene of SARS CoV, clone 12 of 2774 strain

3087 taccacctta tgtccttccc acaagcagcc ccgcatggtg ttgtcttcct acatgtcacg  
 tatgcgccat 3157 3158 cccaggagag gaacttcacc acagcgccag caatttgtca tgaaggcaaa  
 gcatacttcc ctcgtgaagg 3227 3228 tgtttttgtg tttaatggca cttcttggtt tattacacag  
 aggaacttct tttctccaca aataattact 3297 3298 acagacaata catttgtctc aggaattgt  
 gatgtcgta ttgcatcat taacaacaca gtttatgatc 3367 3368 ctctgcaacc tgagcttgac  
 tcattcaaag aagagctgga caagtacttc aaaaatcata catcaccaga 3437 3438 tgttgatctt  
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 aatgaggtcg ctaaaaattt aaatgaatca ctattgacc ttcaagaatt gggaaaaatat gagcaatata  
 3577  
 3578 tta  
 3581

SEQ ID NO. 4 - The amino acid sequence of SA10 fragment of the spike (S) gene of SARS CoV, clone 12 of 2774 strain

1029 YHLSFPQAA PHGVFLHVT YAPSQERNFT TAPAICHEGK AYFPREGVVFV FNGTSWFITQ  
 RNFFSPQIIT 1099 1100 TDNTFVSGNC DVVIGIINNT VYDPLQPELD SFKEELDKYF KNHTSPDVDL  
 GDISGINASV VNIQKEIDRL 1169 1170 NEVAKNLNES LIDLQELGKY EQYI  
 1192

SEQ ID NO. 5 - The amino acid sequence of the neutralizing fragment of the spike (S) gene of SARS CoV, clone 12 of 2774 strain

1055 RNFT TAPAICHEGK AYFPREGVVFV FNGTSWFITQ RNFFSPQIIT TDNTFVSGNC DVVIGIINNT  
 VYDPLQ 1620 1621 PELDSFKEELDKYF KNHTSPDVDL GDISGINASV VNIQKEIDRL NEVAKNLNES  
 LIDLQELGKY EQYI 1192

SEQ ID NO. 6 - The amino acid sequence of SA11 fragment of the spike (S) gene of SARS CoV, clone 12 of 2774 strain

1 MFIFLLFLTL TSGSDLDRCT TFDDVQAPNY TQHTSSMRGV YYPDEIFRSD TLYLTQDLSL  
 PFYSNVTGFH 70  
 71 TINHTFGNPV IPFKDGIYFA ATEKSNVVRG WVGSTMNK SQSVIIINNS TNVVIRACNF  
 ELCDNPFPAV 140  
 141 SKPMGTQHT MIFDNAFNCT FEYISDAFSL DVSEKSGNFK HREFVFKNK DGFLYVYKGY  
 QPIDVVRDLP 210

211 SGFNTLKPIF KLPLGINITN FRAILTAFSP AQDIWGTSA A YFVGDLKPT TFMLKYDENG  
TITDAVDCSQ 280

281 NPLAELKCSV KSFEIDKGIY QTSNFRVVPV G DVVRFPNIT NLCPFGEVFN ATKFPSVYAW  
ERKKISNCVA 350 351 DYSVLYNSTV FSTFKCYGVS ATKLNLCFS NVYADSEFVK GDDVRQIAPG  
QTGVIADYNY KLPDDFMGCV 420 421 LAWNTRNIDA TSTGNYNKY RYLRHGKLRP FERDISNVPF  
SPDGKPCTPP ALNCYWPLND YGFYTTTGIG 490 491 YQPYRVVLS FELLNAPATV CGPKLSTDLI  
KNQCVNFENF GLTGTGVLTP SSKRFQPFQ FGRDVSDFTD 560 561 SVRDPKTSEI LDISPCSFGG  
VSVITPGTNA SSEVAVLYQD VNCTDVSTAI HADQLTPAWR IYSTGNNVFQ 630 631 TQAGCLIGAE  
HVDTSYECDI PIGAGICASY HTVSLLRSTS QKSIVAYTMS LGADSSIAYS NNTIAIPTNF 700 701  
SISITTEVMP VSMAKTSVDC NMYICGDSTE CANLLQYGS FCTQLNRALS GIAAEQDRNT REVFAQVKQM  
770 771 YKTPTLKYFG GFNFSQILPD PLKPTKRSFI EDLLFNKVTL ADAGFMKQYG ECLGDINARD  
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MSECVLGQSK RVDFCGKGYH LMSFPQAAPH GVVELHVTYA 1050 1051 PSQERNFTTA PAICHEGKAY  
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1121 DPLQPELDSF KE

1132